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10/690,860	10/22/2003	Ian M. Williams	NVDA/P000736	6926

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EXAMINER	
HA, LEYNNA A	

ART UNIT	PAPER NUMBER
2135	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/690,860	WILLIAMS ET AL.	
	Examiner	Art Unit	
	LEYNNA T. HA	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) *30-33* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-33 are pending.

Claims 30-33 have been cancelled by applicant.

2. This is a Final rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan, et al. (US 6,374,036), and further in view of Fukushima (US 6,388,638).

As per claim 1:

Ryan discloses a method for protecting digital content, comprising:

providing digital content organized by frames to a rendering unit; and

(col.3, lines 13-27 and 43-45)

altering a portion of the frames of the digital content within the rendering unit in response to tags in a data stream provided thereto. **(col.5, lines 42-67 and col.6, lines 7-12 and 21-51)**

Ryan discloses that a hacker could not easily modify a video signal to force a particular attribute value without seriously degrading the entertainment value of the program. Thus, it is obvious that Ryan's intention is to prevent viewing of the video if modifications were made. Such that a watermark is need to allow the user to view the recorded version (col.7, lines 5-12 and col.6, lines 45-50). Thus, it is obvious Ryan discloses the video frames are visually perceptible in a recorded version thereof. However, Ryan fails to discuss the alterations of the digital content are not visually perceptible for real-time display.

Fukushima discloses displaying images that have been recorded and able to change its display contents (col.1, lines 5-8 and 30-35). Fukushima discusses the prior art cannot display image in real time due to heavy calculation load resulting in unnatural images which intermittently displayed frame by frame. This requires a special purpose processor and circuit, thus would be costly and the apparatus scale increases (col.1, lines 42-47). Therefore, it would have been obvious for a person of ordinary skills in the art to combine Ryan to teach alterations of digital content are visually perceptible in a recorded version with Fukushima to teach the alterations of the digital content are not visually perceptible for real-time display because due to heavy

calculation load resulting in unnatural images which intermittently displayed frame by frame and requires a special purpose processor and circuit (col.1, lines 42-47).

As per claim 2: see Ryan on col.5, lines 41-45; discloses the method, according to claim 1, wherein the step of altering comprises randomly selecting frames for alteration.

As per claim 3: see Ryan on col.7, lines 10-20; discloses the method, according to claim 1, wherein altering comprises removing at least one object from a frame.

As per claim 4: see Ryan on col.7, lines 18-20; discloses the method, according to claim 1, wherein altering comprises relocating at least one object in a frame.

As per claim 5: see Ryan on col.7, lines 18-20; discloses the method, according to claim 1, wherein altering comprises adding at least one object to a frame.

As per claim 6: see Ryan on col.2, lines 40-41 and col.5, lines 64-67; discloses the method, according to claim 5, wherein the rendering unit is a graphics processing unit.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7-14 and 20-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Ryan, et al. (US 6,374,036).

As per claim 7:

Ryan discloses a device for protecting digital content, comprising:

a rendering unit configured to detect tags in a data stream **(col.3, lines 13-27 and 43-45)** and to associate the detected tags with commands for altering image content. **(col.5, lines 42-67 and col.6, lines 7-12 and 21-51)**

As per claim 8: see Ryan on col.6, lines 28-38; discloses the device, according to claim 7, wherein the rendering unit includes a table for storing symbols used when associating the detected tags with the commands.

As per claim 9: see Ryan on col.6, lines 39-42; discloses the device, according to claim 8, wherein the rendering unit comprises memory for storing overlays for alteration of the image content.

As per claim 10: see Ryan on col.5, lines 42-45; discloses the device, according to claim 8, wherein the rendering unit comprises a random number generator for randomly selecting when to apply the commands.

As per claim 11: see Ryan on col.5, lines 15-25; discloses the device,

according to claim 10, wherein the random number generator randomly selects when to apply overlays.

As per claim 12: see Ryan on col.6, lines 48-50; discloses the device, according to claim 10, wherein the rendering unit comprises a decryptor.

As per claim 13: see Ryan on col.3, lines 43-45; discloses the device, according to claim 10, wherein the rendering unit is configured to detect watermarks and to alter image frames in response to detected watermarks.

As per claim 14: see Ryan on col.3, lines 43-45; discloses the device, according to claim 10, wherein the rendering unit detects watermarks and provides a graphical user interface in response to at least one detected watermark.

As per claim 20: see Ryan on col.3, lines 24-26; discloses the device, according to claim 10, wherein the device is a digital video camera.

As per claim 21: see Ryan on col.3, lines 24-26 and col.4, lines 1-4; discloses the device, according to claim 10, wherein the device is a digital video disc recorder.

As per claim 22: see Ryan on col.3, lines 24-26 and col.4, lines 1-4; discloses the device, according to claim 10, wherein the device is a compact disc recorder.

As per claim 23: see Ryan on col.3, lines 24-26 and col.4, lines 1-4; discloses the recording device, according to claim 10, wherein the device is a hard disk drive recorder.

As per claim 24: see Ryan on col.3, lines 24-26 and col.7, lines 49-50; discloses the device, according to claim 10, wherein the device is a digital tape drive recorder.

As per claim 25: see Ryan on col.3, lines 24-26 and col.7, lines 49-50; discloses the device, according to claim 10, wherein the device is a floppy disk drive recorder.

As per claim 26: see Ryan on col.3, lines 24-26 and col.4, lines 1-4; discloses the device, according to claim 10, wherein the device is a solid state memory recorder.

As per claim 27: see Ryan on col.4, lines 1-4; discloses the device, according to claim 10, wherein the device is a computer.

As per claim 28: see Ryan on col.4, lines 1-4; discloses the device, according to claim 10, wherein the device is a monitor.

As per claim 29: see Ryan on col.3, line 67 – col.4, line 4; discloses the device, according to claim 10, wherein the device is a television.

As per claims 30-33: Cancelled

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being anticipated by Ryan, et al. (US 6,374,036), and in further view of Rhodes, et al. (US 5,432,900).

As per claim 15:

Ryan discloses a device for protecting digital content, comprising a rendering unit configured to detect tags in a data stream **(col.3, lines 43-45)** and to associate the detected tags with commands for altering image content **(col.5, lines 42-67 and col.6, lines 7-12 and 21-51)**. However, Ryan did not include the graphical user interface.

Rhodes discloses application software interfaces with system software through a graphics application program interface (API), a video API, and an audio API (col.2, lines 46-48). Therefore, it would have been obvious for a person of ordinary skills in the art to modify Ryan to include the API as taught in Rhodes because the APIs provide high level functional interface for the manipulation of graphics, video, and audio information (col.2, lines 49-51).

As per claim 16: see Ryan on col.3, lines 23-30; discloses the device, according to claim 15, wherein the graphical user interface provides a data entry block for entry of a key.

As per claim 17: see Ryan on col.6, lines 25-29; discloses the device, according to claim 16, wherein the rendering unit is configured to down sample in response to a failure to enter an acceptable key.

As per claim 18: see Ryan on col.4, lines 62-64; discloses the device, according to claim 16, wherein the rendering unit is configured to disable recording in response to a failure to enter an acceptable key.

As per claim 19: see Ryan on col.3, lines 15-18; discloses the device, according to claim 16, wherein the rendering unit is configured to randomly alter the selected frames in response to a failure to enter an acceptable key.

Response to Arguments

6. Applicant's arguments filed 4/16/2007 have been fully considered but they are not persuasive.

Examiner traverses the argument regarding claim 7 (on pg.6), that claims a rendering unit configured to detect tags in a data stream and to associate the detected tags with commands for altering image content. Claim 7 does not limit what type or kind of altering is involved and therefore can broadly be interpreted as encoding or decoding . Ryan suggests tags or fields (col.3, lines

18-19) are associated to a particular command or attribute where selecting particular fields for encoding (col.5, lines 42-67) and decoding (col.6, lines 7-12). Ryan reads on the limitation of "to associate the detected tags with commands for altering image content". In addition, Applicant argues (on pg.6, lines 20-28) that Ryan teaches altering the portion of digital content that is not visible to the viewers. This confirms Applicant agrees that Ryan at the least suggests tags with commands for altering image content. In addition, Applicant argues that Ryan does not alter the image data is the portion of digital content visible to end-users. Whether visible or not visible to viewers/users is not relevant because claim 7 broadly limits associating the detected tags for altering image content. Hence, claim 7 fails to limit altering the image data that is the portion visible to end-users. Therefore, claims 7-14 and 20-33 remains rejected by Ryan.

Examiner traverses the arguments regarding claim 1 (pg.8), that Ryan fails to claim are visually perceptible in a recorded version of the content if the recording of the digital content is unauthorized that the recording is disabled. However, Ryan also discloses recording if it is authorized or matched to digital video carrying the field markers and watermarks (col.6, lines 7-12 and 21-42 and col.7, lines 1-13). Thus, Ryan reads on the claimed invention. However, Ryan fails to discuss the alterations of the digital content are not visually perceptible for real-time display. Thus, Fukushima is brought forth to teach this limitation. The Ryan and Fukushima combination obviously teaches the

alterations of the digital content are not visually perceptible for real-time display but are visually perceptible in a recorded version thereof because due to heavy calculation load resulting in unnatural images which intermittently displayed frame by frame and requires a special purpose processor and circuit (Fukushima-col.1, lines 42-47).

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LHa

HOSUK SONG
PRIMARY EXAMINER